

I 13581-63

ACCESSION NR: AP3003925

0
 ROM-3 equipment at 180 kv, 15 mamp, 0.5 mm Cu filter and 1 mm Al filter at 32.3 μ /min. Gamma irradiation involved the use of EGO-2 equipment at 295--276 μ /min. Survival span of the animals was 6-12 days after irradiation. The introduction of bone-marrow cells, accompanied by the oral administration of 3 mg of biomyacin two times a day, resulted in survival of 50% of the experimental animals (compared to no survival in the controls) and a smaller increase of Dische-positive substances in the urine of the experimental animals than in the control animals. During the first day after irradiation by the absolute minimum lethal dose the urine of animals not given bone-marrow cells was found to contain 25-30 times as much desoxycytidin and 5 times as much timidin as normal nonirradiated animals. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 10Sep62

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: AM

NO REF SOV: 004

OTHER: 008

Card 2/2

KHNYCHEV, S. S. KALICHOU, V. S.

SESSION A-4-3 : Post-Irradiation Treatments in Mammals

(a)
Changes in the Content of Nucleosides in Animal Urine Following Radiation Damage

P. D. Gorkhonor, T. A. Fedorova, M. F. Sbitava, Yu. A. Zharkov and V. S. Kalichov

Changes in the level of DNA metabolites of body fluids are a specific index of radiation damage, and the estimation of their content in the urine may serve as a good biochemical test for this damage. The test may be used to evaluate therapeutic agents applied for the treatment of radiation sickness, as well as for the evaluation of drugs protecting animals against lethal radiation doses.

Using paper chromatography and ion exchange column methods the deoxyribosides deoxycytidine, deoxythymidine, deoxyadenosine and deoxyguanosine were identified in the urine of normal and irradiated animals. Quantitative changes in their content in the 24 hr specimens of rat, mouse and dog urine were established during the course of radiation diseases induced by lethal doses of X- and γ-rays.

The deoxyribosides were estimated in the urine of normal and irradiated rats following the transplantation to them of the bone marrow cells. This was done in order to elucidate some aspects of the mechanism of biochemical changes, and to evaluate therapeutic effects. It was established that the transplantation of bone marrow cells to normal rats lowers the level of deoxyribosides (deoxycytidine included) by 30 to 60%. Intravenous injection of bone marrow cells to rats irradiated with lethal doses also lowers the content of nucleosides in the urine. It points to the intensification of DNA synthesis, which has been inhibited by radiation.

Institute of Pathology, Academy of Sciences, Moscow, USSR

31

report presented at the 2nd Intl. Congress of Radiation Research,
Harrogate/Yorkshire, Gt. Brit. 5-11 Aug 1962

KHN'CHEV, S.S.

ACCESSION NR: AT4042653

5/0000/63/000/000/0056/0060

AUTHOR: Baranov, V. I.; Gyurdzhian, A. A.; Lomova, M. A.; Radkevich, L. A.;
Tutochkina, L. T.; Fedorova, T. A.; Furayeva, L. P.; Khn'chev, S. S.; Artem'yeva,
N. S.

TITLE: The effect of gravity on the development of organisms

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963.
Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy
konferentsii. Moscow, 1963, 56-60

TOPIC TAGS: gravity, centrifuge, organism development, physiological function,
rat, chronic centrifugation, blood composition, urine composition, Coriolis
acceleration

ABSTRACT: In this investigation, Baranov and his co-workers designed a centrifuge
for small animals with an arm radius of 135 cm which could be regulated to produce
artificial gravitational fields of from 4 to 5 g. The centrifuge was arranged
in such a way that the arms and cages at the end of the arms would simultaneously
rotate around their axes producing Coriolis accelerations. A single control panel

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ACCESSION NR: AT4042653

regulated the photography and illumination of cage interiors, automatic feeding of the animals, and the revolving rate of the centrifuge. It was possible to record five separate physiological functions from some specially prepared animals. Experiments were conducted on white rats, commencing on the first day after birth and continuing for 25 days. Litters consisting of 200 animals were divided into experimental and control groups. All animals were born at approximately the same time. Experimental animals were subjected to accelerations ranging from 1.5 to 3 g for periods of from 4 to 6 hours, 6 days per week. The weighing of all animals took place every three days as did biochemical assays of the blood and urine, tests of vestibular activity, and the determination of the time of sexual maturity in female animals. At the termination of the experiment, a comparative test of the response of both experimental and control animals to brief accelerations of 5, 10 and 20 g was conducted. After 20--25 days, the body weight of chronically centrifuged animals was 60--80% that of the controls. The composition of erythrocytes (89.6%), leukocytes (93.4%), and hemoglobin (99.1%) in the blood of experimental animals with respect to control animals reflected a slightly anemic condition. While blood albumin in experimental animals was somewhat lower than in the controls, serum mucoid composition was higher, indicating a change of dystrophic character. Urine assays of experimental animals showed that the levels of Diche-positive substance (48%), nitrogen (62%), creatine (31%),

Card 2/3

ACCESSION NR: AT4042653

and creatinine (60%) were lower than in the control animals. Finally, the estral cycle of experimental females was significantly altered, though one female gave normal birth to young. In the second investigation, control animals exposed to brief accelerations of 5 g showed noticeable increases in the level of non-esterified fatty acids, decreases in serum mucoid composition, and increases in the albumin-globulin ration. However, at 20 g there was an increase in serum mucoid composition and a decrease in the albumin-globulin ration. Biochemical variations in experimental animals subjected to the same accelerations were insignificant. The authors conclude that gravity plays a complex role in the physiological processes of the developing organism but that the true mechanism of this role is far from being understood.

• ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card 3/3

L 16878-66 EWT(m)	
ACC NR: AP6001322	SOURCE CODE: UR/0248/65/000/009/0070/0074
AUTHOR: Baluda, V. P.; Lysogorov, N. V.; Khnychev, S. S.; Ishmukhametova, D. N.; Rukazenkova, Zh. N.; Gorlanova, I. A.; Rudakov, I. A.; Susanyan, T. A.	
ORG: Institute of Medical Radiology AMN SSSR, Obninsk (Institut meditsinskoy radiologii AMN SSSR) 25 A	
TITLE: Blood coagulation and fibrinolytic activity in acute radiation sickness 1955	
SOURCE: AMN SSSR. Vestnik, no. 9, 1965, 70-74	
TOPIC TAGS: radiation sickness, blood, coagulation, hematology	
ABSTRACT: The hemorrhagic syndrome is considered the gravest manifestation of acute radiation sickness and to a great extent determines its degree, duration and outcome. However, despite numerous investigations of the factors responsible for hemorrhage in this disease, the pathogenesis of this phenomenon has not been elucidated. The authors have investigated the functional conditions of coagulation and of the fibrinolytic system of the blood in acute radiation sickness produced by gamma-radiation with Co ⁶⁰ . 256 "August" strain rats were irradiated with	
Card 1/3	UDC: 617-001.28-036.11-07:[616.151.5+616.153.962.4]

L 16778-66

ACC NR: AP6001322

600 rad each. Four phases were discernible during the course of the disease: Phase I--primary reaction (1-2 days following irradiation), II--hidden (3-6 days), III--peak (7-15 days), IV--recovery (20-30 days). Detailed descriptions are presented of the physical appearance and behavior of the animals during the four phases as well as of the changes found in the cellular composition of the blood, bone marrow and spleen. The following changes in the clotting system of the blood were observed following irradiation: initial decrease (phase I) followed by an increase in the coagulation time, reduced tolerance of plasma to heparin, diminished prothrombin activity, increased thrombin time and fibrinogen concentration, first an increase (phase I) then a decrease (Phase III) in thrombin concentration, reduced thermal stability, the emergence of fibrinogen B, reduced fibrinase and increased fibrinolytic activity, diminished platelet count and delayed retraction of the clot. The electron microscope showed disturbances in the fibrin fibers such as rupture and vacuolization. It is evident that the hemorrhagic syndrome appears in the first phase only 24 hours after irradiation as indicated by the presence of blood in the feces at that time. It can therefore be concluded that in acute radiation sickness damage to the blood vessel walls first occurs in the gastrointestinal tract and only later spreads to the vessels of the skin. Also responsible for the hemorrhage

Card 2/3

L 16778-66

ACC NR: AP6001922

gic syndrome is the disordered coagulation of the blood which in itself can cause alterations in the vascular walls and produce bleeding in addition to its more obvious effects. Orig. art. has: 1 table.

SUB CODE: 06/

SUBM DATE: 05Jun65/

ORIG REF: 008/

OTH REF: 017

Card 3/3 MC

BALUDA, V.P.; LYSOGOROV, N.V.; KHNYCHEV, S.S.; ISHMUKHMETOVA, D.N.;
RUKAZENKOVA, Zh.N.; GORLANOVA, T.A.; RUDAKOV, I.A.; SUSANYAN, T.A.

Blood coagulation and its fibrinolytic activity in acute
radiation sickness. Vest. AMN SSSR 20 no.9:70-74 '65.

(MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

RUDAKOVA, S.F.; ZHUKOVA, N.A.; KHNYCHEV, S.S.; SUSANYAN, T.A.; KOZLOVA, I.I.

Some new aspects of the effect of ϵ -aminocaproic acid
on the organism. Vest. AMN SSSR-20 no.9:74-77 '65.

(MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

ALEKSANDROV, Nikolay Nikolayevich; KOCHERGINA, Anna Vasil'yevna;
POKHOVSKIY, Leonid Alekseyevich. Primal uchastiye
KHNYKIN, V.F.; LOGUNTSOV, B.M., otv. red.; GEYMAN, L.M.,
red. izd-va; MAKSIMOVA, V.V., tekhn. red.

[Contemporary mechanization for working placer deposits] Sov-
remennaya mekhanizatsiya dlia razrabotki rossypei; spravochnoe
posobie. Moskva, Gosgortekhnizdat, 1963. 462 p. (MIRA 16:7)
(Hydraulic mining—Equipment and supplies)
(Automatic control)

AKHNYKIN, V.F., kand. tekhn. nauk

Compactness of hydraulic giant jets and selection of the
optimum diameter of nozzles. Ugol' 39 no.3:26-29 My'64.
(MIRA 17:5)

1. Institut gornogo dela im. A.A. Skochinskogo.

MARTYNOV, A.A.; KHNYKIN, V.I.

Distribution boundaries of Lower Permian salt-bearing sediments
in the Dnieper-Donets Lowland. Trudy UkrNIGRI no.5:30-33 '61.

Principles of the structural regionalization and identification
of the promising uplifts of the Dnieper-Donets Lowland. Ibid.:34
(MIRA 18:3)

KHNYKINA, L.A.

Pharmacognostic study of crude skullcap *Scutellaria baicalensis*
Georgi. Apt. delo 11 no.1:27-30 Ja-F '62. (MIRA 15:4)

1. Tomskiy meditsinskiy institut.
(SKULLCAP (BOTANY)) (PHARMACOGNOSY)

KHNYUNIN, I. D.

PA 59/49T28

USSR/Medicine - Haff's Disease, Feb 49

Etiology
Medicine - Disposal and Purification of
Sewage

"Acute Alimentary Myositis (Haff-Tusovsky's
Disease)," I. D. Khnyunin, Chair of Gen Hygiene,
Korostivsk Med Inst, 4 1/2 pp

"Cig 1 San" No 2

Intoxication brought about by poisons absorbed
from preserved food by the fatty tissues and
acting on voluntary muscles leads to rapid
fatigue. Data on this disease is lacking. There-
fore, recommends extensive clinico-epidemiological

59/49T28

USSR/Medicine - Haff's (Cont'd) Feb 49
Disease, Etiology

and experimental studies. Suggests control of
dumping waste containing hemp-nettle remaining in
places where fish might have access to them.

59/49T28

KHNYUNINA, O.I.; GOLOVINA, A.A. (Novosibirsk)

On Marfan's syndrome. Klin.med. 39 no.4:55-60 '61. (MIRA 14:4)

1. Iz kafedry fakul'tetskoy terapii (zav. - zaslužennyy deyatel' nauki prof. G.D. Zaleskiy) i kafedry patologicheskoy anatomii (zav. - prof. B.M. Konstantinov) Novosibirskogo meditsinskogo instituta (dir. - zaslužennyy deyatel' nauki prof. G.D. Zaleskiy).

(ARACHNODACTYLY)

KHNZORYAN, S.M.

Mining snout beetles on the oaks of the Armenian S.S.R. and their
significance in forestry. Izv.AN Arm.SSR,Biol.i sel'khoz.nauki. 4
no.1:41-46 '51. (MLRA 9:8)

1. Botanicheskiy institut i sad Akademii nauk Armyanskoy SSR.
(Armenia--Snout beetles)
(Oak--Diseases and pests)

KHNZORYAN, S.M.

Coleoptera pests of the willow family in the Armenian S.S.R. Izv.
AN Arm.SSR,Biol.i sel'khoz.nauki 6 no.3:43-54 '53. (MLRA 9:8)

1. Sektor zashchity rasteniy Akademii nauk Arm. SSR.
(ARMENIA--BEETLES) (WILLOWS--DISEASES AND PESTS)

KHNZORYAN, S.M.

Tanyproctus (*Tetraproctus*) *antennatus* sp.nov., a new representative of the family of leaf-horned beetles (Coleoptera, Scarabaeidae) from the Armenian S.S.R. Dokl.AN Arm.SSR 16 no.5:149-150 '53. (MLRA 9:10)

1.Zoologicheskii institut Akademii nauk Armyanskoy SSR. Predstavleno G.Kh Bunyatyanom.
(Kanakar--Scarabaeidae)

KHNZORYAN, S.M.

New cockchafer from Armenian S.S.R.--*Amphimallon (Erytrotrogus)*
medvedevi sp. nov. (Coleoptera, Scarabaeidae). Dokl. AN Arm.SSR
17 no.1:27-28 '53. (MLRA 7:6)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR. Pred-
stavlena G.Kh.Bunyatyane.
(Armenia--Cockchafer)

KHNZORIAN, S.M.

A new species of the family Curculionidae found in the Armenian SSR:
Curculio (Balanobius) excellens sp. n. Dokl. AN Arm. SSR 17 no.2:
63-64 '53. (MIRA 8:2)

1. Zoologicheskii Institut Akademii nauk Arnyanskoy SSR, Predstav-
leno G.Kh. Binyatyanom.
(Armenia--Weevils)

KHNZORYAN, S.M.

Role of the Coleoptera in the fertilisation of flowers. Izv. AN
Arm.SSR.Biol.i sel'khoz.nauki 7 no.6:47-55 Je '54. (MIRA 9:8)

1. Zoologicheskii institut AN Arm. SSR.
(Plant fertilisation) (Beetles)

KHEZORYAN, S.M.

New species of beetle found in the Armenian S.S.R. (Coleoptera,
Chrysomelidae) *Haltica armeniaca* sp. n. Dokl. AN Arm. SSR 19 no.2:
59-60 '54. (MLRA 8:1)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR. Predstavleno
G.Kh. Bunyatyanom. (Armenia—Beetles)

KHNZORYAN, S.M.

Four new species of Coleoptera from the Armenian S.S.R. (Coleoptera, Insecta). Dokl.AN Arm.SSR 22 no.3:135-139 '56. (MLRA 9:8)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR. Predstavleno R.Kh. Buniatyanom.

(Armenia--Beetles)

KHNZORYAN, S.M.

New leaf-rolling weevil (Coleoptera, Attelabidae) *Coenorrhinus*
phryganophilus Khnserian sp. nov. from the Armenian S.S.R. Dokl.
AN Arm.SSR 22 no.5:225-226 '56. (MLRA 9:9)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR.
Predstavleno G.Kh. Bunyatyanom.
(Armenia--Beetles)

~~UNCLASSIFIED~~

New species of darkling beetle (Coleoptera, Tenebrionidae)
from the Armenian S.S.R. Dokl.AN Arm.SSR 23 no.1:41-43 '56.
(MLRA 9:11)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR.
Predstavleno G.Kh. Bunyatyanom.
(Armenia--Darkling beetles)

KHNZORYAN S. M.

Country : USSR
 CATEGORY : P-5
 Abs. JOUR. : EZhbiol., No. 19, 1958, No. 97753
 AUTHOR : Khnzoryan, S. M.
 INST. : Academy of Sciences Armenian SSR
 TITLE : Coleoptera of the Oak in Armenian SSR

ORIG. PUB. : Zool. sb. AN ArmSSR, 1957, No 10, 59-152

ABSTRACT : In the Armenian SSR two species of oak are of economic importance: the Georgian Oak (*Quercus iberica*) and the Eastern or Large-anther Oak (*Q. macranthera*), the fauna of which is considered jointly. Altogether 347 species of coleoptera are reported, among which the most numerous group is that of xylophages -- 177 species (48.2% of the fauna). The role of coleoptera in biocenosis of the oak is considered, as well as the influence of the environment on dynamics of development of pests, and also the origin of the fauna of oak plantings in Armenia.
 V. I. Grimal'skiy.

CARD:

KENZORYAN, S. M.

New species of Coleoptera from the Armenian S.S.R. and the Nakhichevan
A.S.S.R. Zool. sbor. no. 10:153-183 '57. (MIRA 11:7)
(Armenia--Beetles)
(Nakhichevan A.S.S.R.--Beetles)

KHNZORYAN, S.M.

KHNZORYAN, S.M.

A new rhipiphorid beetle (Coleoptera, Rhipiphoridae) from the
Armenian S.S.R. Dokl. AN Arm.SSR 24 no.5:231-232 '57. (MIRA 10:7)

1. Zoologicheskii institut Akademii nauk Armyanskoy SSR Pred-
stavleno V.A. Fanardzhyanom.

(Armenia--Beetles)

KHEZORYAN, S.M.

New beetle species from the Talysh (Insecta, Coleoptera). Izv. AN
Azerb. SSR Ser. biol. i sel'khoz. nauk no. 3:57-62 '59.
(MIRA 12:8)

(Lenkoran District--Beetles)

KHNZORYAN, S.M.

New comb-clawed beetle from the Aras Valley (Coleoptera,
Alleculidae, Mycetocharina riabovi Khnzorian sp.nov.). Dokl.
AN SSR 29 no.3:141-143 '59. (MIRA 13:2)

1. Zoologicheskii institut AN ArmSSR. Predstavleno akademikom
AN ArmSSR V.Fanardzhyanom.
(Aras Valley--Comb-clawed beetles)

KHNZORYAN, S.M.

New species of comb-clawed beetles from the Armenian S.S.R. (Coleoptera, Alleculidae) *Helictotaurus emmae* Khnorian sp. nov. Dokl. AN Arm. SSR 28 no.4:191-192 '59. (MIRA 12:11)

1. Zoologicheskii institut AN ArmSSR. Predstavleno akademikom AN ArmSSR V.A. Panardshyanom.
(Armenia--Comb-clawed beetles)

KHNZORYAN, S.M.

New coleopteran species (Coleoptera, Insecta) from the
Armenian S.S.R. and the Nakhichevan A.S.S.R. Pt.2. Zool.
sbor. 11:65-78 '59. (MIRA 13:8)
(Armenia--Beetles) (Nakhichevan A.S.S.R.--Beetles)

KHYZORYAN, S.M.

Three new species of Coleoptera from the Araks Valley.
Dokl. AN Arm. SSR 31 no. 4:251-256 '60. (MIRA 13:12)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR.
Predstavleno akademikom AN Armyanskoy SSR V.O.Gulkanyanom.
(Aras Valley--Beetles)

CHILINGARYAN, A. A.; KHNZORYAN, S. M.

Zoological Institute of the Academy of Sciences of the Armenian
S.S.R. and the 40th anniversary of the establishment of Soviet
rule in Armenia. Zool. sbor. no.12:5-40 '62.

(MIRA 15:10)

(Armenia—Zoological research)
(Bibliography—Armenia—Zoology)
(Armenia—Zoology—Bibliography)

KHYZORYAN, S. M.

New species of Coleoptera from Transcaucasia. Zool. sbor. no. 12:
99-124 '62. (MIRA 15:10)

(Transcaucasia--Beetles)

Khoba, V.

107-57-6-48/57

AUTHOR: Khoba, V. (Odessa)

TITLE: Lacquaring of Chassis (Pokrytiye shassi lakom)

PERIODICAL: Radio, 1957, Nr 6, p 56 (USSR)

ABSTRACT: Fifteen grams of powdered aluminum should be put in 110 grams nitro-lacquer diluted by acetone. A thin film is spread over the chassis by means of an ordinary atomizer.

AVAILABLE: Library of Congress

Card 1/1

ABUTALIYEV, F.B.; KHOBDABERGANOV, R.ZH.; KOLOSOV, B.V.

Extremum methods for finding the optimal parameters of waste
rock piling during open-pit mining operations. Izv. AN Uz. SSR.
Ser. tekhn. nauk 9 no.3:67-76 '65. (MIRA 18:8)

1. Institut mekhaniki i Vychislitel'nyy tsentr AN UzSSR.

AKHMETOV, K.T.; DONCHENKO, P.A.; KUBYSHEV, N.N.; VOLKOV, I.P.; KARABETIAN, V.K.;
YELYAKOV, I.I.; CHIKRIZOV, M.V.; KHOBDABERGENOV, R.Zh.

Modernizing the industrial equipment of lead production and the
growth of labor productivity. TSvet. met. 36 no.7:11-19 JI
'63. (MIRA 15:8)
(Lead industry--Equipment and supplies)

KHOBENSKIY, B. D.,

"The Role of Innovators in the Technolgoical Progress of a Plant," Technological
Developments at the Leningrad Metal Works imeni Stalin, Moscow, Mashgiz, 1957.
p. 277.

TSERMAN, M.D.; OSTAPYSHIN, N.K.; KHOBER, F.S.

Use of a combined piecework and bonus system of wages for repair
work. Sakh. prom. 32 no.4:49-51 Ap '58. (MIRA 11:6)

1.Sakharnyy zavod "Kreshchatik."
(Repairing) (Wages)

SMIRNOV, V.S.; KOSTENKO, M.P.; NEYMAN, L.R.; KOSTENKO, M.V.; DOMANSKII,
B.I.; ZALESSKIY, A.M.; USOV, S.V.; AYZENBERG, B.L.; DUBINSKIY,
L.A.; ALEKSANDROV, G.N.; GRIBOV, A.N.; GRUZDEV, I.A.; LEVINSHTEYN,
M.L.; MIKIRTICHEV, A.A.; MIKHAYLOVA, V.I.; RUZIN, Ya.L.; STEPANOV,
K.S.; KHOBERG, V.A.; SHCHERBACHEV, O.V.

M.D. Kamenskii; on his 80th birthday. Inv. vys. ucheb. zav. ||
energ. 8 no.7:130-131 J1 '65. (MIRA 18:9)

KHOBERG, V. A.

The following is among dissertations of the Leningrad Polytechnic Institute imeni Kalinin:

711.7.
"Investigation of the Impulse Stability of the Insulation of a Transmission Line on Wooden Supports." 8 March 1954. An investigation was made of the impulse stability of wood, combination insulation "insulator string -- cross member -- insulator string" and "air gap -- wood." An evaluation was made of the voltage distribution along the elements of the combination insulation.

SO: M-1048, 28 Mar 56

8(0)

SOV/112-59-4-6902

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4, p 70 (USSR)

AUTHOR: Aleksandrov, G. N., and Khoberg, V. A.

TITLE: Estimation of the Space-Charge Region in an AC Corona-Displaying Gap

PERIODICAL: Tr. Leningr. politekhnich. in-ta, 1958, Nr 195, pp 323-328

ABSTRACT: The space-charge volume of a corona-displaying gap depends on the amplitude and frequency of the applied voltage and on the corona loss. Barriers set within the corona gap limit the space-charge region and lessen the losses. The space-charge region around a wire can be found by the deviation of $P = f(U)$ characteristic from that pertaining to a free gap. Measurements were made in a cylinder of 2 m diameter and a wire of 0.37 cm diameter, at 25 and 50 cps, and with barriers of 15-50 cm. Formulae have been developed for the radius of the space-charge region and for the voltage on the wire, which permit evaluating the space-charge region around the wire and selecting the research cylinder size so that the measurements would not be distorted by a through convection current.

Card 1/1

V.A.Kh.

L 22149-66

ACC NR: AP6012968

SOURCE CODE: UR/0143/65/000/007/0130/0131

AUTHOR: Smirnov, V. S.; Kostenko, M. P.; Neyman, L. R.; Kostenko, M. V.;
Domanskiy, B. I.; Zaleskiy, A. M.; Ussov, S. V.; Ayzenberg, B. L.; Dubinskiy, L. A.;
Aleksandrov, G. N.; Gribov, A. N.; Gruzdev, I. A.; Leinshteyn, M. L.;
Mikirtichev, A. A.; Mikhaylova, V. I.; Ruzin, Ya. L.; Stefanov, K. S.;
Khoberg, V. A.; Shcherbachev, O. V.

ORG: none

TITLE: Honoring the 80th birthday of Mikhail Davidovich Kamenskiy

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 7, 1965, 130-131

TOPIC TAGS: electric power engineering, electric engineering personnel,
hydroelectric power plant, thermoelectric power plant

ABSTRACT: On 19 April 1965 Prof. Dr. Techn. Sci. Mikhail David-
ovich Kamenskiy celebrated his 80th birthday and the 55th anni-
versary of his active work as a power expert. Mikhail Davidovich
is a 1909 graduate of the Petersburg Polytechnic Institute - since
his graduation he has been associated with this institute, now
renamed Leningrad Polytechnic Institute, as an instructor. He is
a major scientist and specialist in electric power grids and sys-
tems. He has been a major contributor to the establishment of
the Leningrad Power Grid and various large thermal and hydro-

Card 1/2

L 22149-66

ACC NR: AP6012968

electric power stations and an active participant in the design and construction of high- and low-voltage power systems in many cities of the Soviet Union. During the Siege of Leningrad in World War II he was a member of the Municipal Party Defense Committee. Since the war Mikhail Davidovich has been head of the Chair of Electric Power Grids and Systems at the Leningrad Polytechnic Institute and has been working on the methods of calculating the economic regimes of power system operation and on the problems of the present-day development of urban power systems. M.D. Kamenskiy has published more than 80 works, including both original studies as well as textbooks that are popular in the Soviet Union and abroad. He is the chairman of the Section on Power Systems and Grids under the Leningrad Division of the Scientific and Technical Division of the Power Industry and organizer of and participant in many scientific-technical conferences and meetings. His merits as an educator of a new school of Soviet power engineers are equally large. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUBM DATE: none

Cord 2/2 d/a

KHOBETS, L.G.

Using a ring made of a ferromagnetic band in spectral analysis of
noises. Prom. aerodin. no. 18: 80-94 '60. (MIRA 14.15)
(Magnetic recorders and recording)
(Acoustical engineering)

KHOBLOCHOVA, Jirina, MUDr

Organization of psychiatric care of neurotics. Neur. psychiat.
cesk. 17 no.4:213-216 Aug 54.

1. Z psychiatrické kliniky v Praze, přednosta prof. MUDr
Z. Mysliveček

(NEUROSES, therapy
psychiatric care, organiz. in Czech.)

RABOTNOY, V.T.; KNOBCT, M.R.

Some regularities in the change of the density and specific weight
of the Riphean (Sinean) sediments of southwestern Yakutia. Neftegaz.
geol. i geofiz. no.1:34-37 '65. (MIRA 18:5)

1. Yakutskoye geologicheskoye upravleniye.

DZHABIROV, A.; ORDYNSKIY, I.; KHOBOTOV, N., pensioner; TOMUS, Ye.,
domokhozyayka; GUTKOVSKAYA, R., KRYLOVSKAYA, L.

Saran' today. Mast. ugl. 8 no.9:19-21 8 '59.

(MIRA 13:2)

1. Karagandinskiy ugol'nyy basseyn. 2. Brigadir dobychnoy shakhty No.106 g.Saran' (for Dzhabirov). 3. Predsedatel' postoyanno deystvuyushchey komissii obshchestvennogo kontrolya za rabotoy otdela rabochego snabzheniya g.Saran' (for Ordynskiy)
 4. Literaturnyy sotrudnik gorodskoy gazety "Golos shakhtera," g.Saran' (for Gutkovskaya). 5. Spetsial'nyy korrespondent zhurnala "Master uglia" (for Krylovskaya).
- (Karaganda Basin--Cities and towns)

KHOBOTOV, S.I.; ANAN'YEVSKIY, M.G.

Mechanizing the removal of scale from under the roll tables
of the 950 rolling mill. Sbor.rats.predl.vnedr.v proizvod.
no.5:24 '60.

(MIRA 14:8)

1. Zlatoustovskiy metallurgicheskiy zavod.
(Rolling mills—Technological innovations)

POCHTOVIK, G., nauchnyy sotrudnik; KRASNOVSKIY, R., nauchnyy sotrudnik;
KHOBO TOV, V.

"Radio and electronics in the production of precast reinforced concrete"
by I.S.Vainshtok. Reviewed by G.Pochtovik, R.Krasnovskiy and
V.Khobotov. Na stroi. Ros. 3 no.2:39-40 F '62. (MIRA 16:2)

1. Kafedra stroitel'nykh konstruktsey Moskovskogo avtodorozhnogo
instituta (for Pochtovik, Krasnovskiy). 2. Zaveduyshchiy laboratoriyey
elektroniki Moskovskogo avtodorozhnogo instituta (for Khobotov).
(Electronic apparatus and appliances) (Vainshtok, I.S.)
(Concrete plants—Equipment and supplies)

KHOBOTOV, V.P.

Attachment for milling three grooves. Bul. tekhn.-ekon. inform.
Gos. nauch.-issl. inst. nauch. i tekhn. inform. 18 no. 12:30
D '65 (MIRA 19:1)

KHOBOTOV, V.P.

Universal gauges. Mashinostroitel' no.9:23 S '64.

(MIRA 17:10)

KHOBOTOV, Yu. (Karpinsk)

Guiding spirit of a workers' group. Mast, ugl. 9 no.3:24
Mr. '60. (MIRA 13:6)

(Trade unions) (Women as miners)

KHOBOTOV, Yu.

Idle running. Sov.shakht. 10 no.4:36-37 Ap '61.

(Coal mines and mining) (Trade unions)

(MIRA 14:9)

PROBOTOV, Yu. (Stalinsk)

A good name. Sov. profsoiuzy 17 no. 3:29 F '61. (MIRA 14:2)
(Kuznetsk Basin--Coal mines and mining--Labor productivity)

KHOBOTOV, Yu.

Steep steps. Sov. shakh. ll no.10:7-9. 0 '62. (MIRA 15:9)
(Coal mines and mining)

SMIRNOV, Yevgeniy Vasil'yevich, kand.tekhn.nauk; KHOBOTOV, Yu.A., red.

[Over-all mechanization of coal and ore handling in river harbors] Kompleksnaya mekhanizatsiya peregruzki uglia i rudy v rechnykh portakh. Moskva, 1959. 151 p. (MIRA 13:7)

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta.
(Harbors--Equipment and supplies)
(Ore handling--Equipment and supplies)

ZVONKOV, V.V., prof.; POMKINSKIY, L.I., inzh.. Prinimali uchastiye:
STRUENNIKOVA, V.P., inzh.; POKROVSKAYA, K.K., inzh.; DZADZAMIYA,
L.A., tehnik; SHAPOSHNIKOV, Ye.M., inzh., KHOBOTOV, Yu.A.,
red.; BOBROVA, V.A., tekhn.red.

[Ship tractive and propulsive speed calculations; a proposed
guide] Sudovye tiagovye i skorostnye raschety; proekt ruko-
vodstva. Moskva, Izd-vo "Rechnoi transport," 1959. 213 p.
(MIRA 13:7)

1. Chlen-korrespondent Akademii nauk SSSR (for Zvonkov).
2. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki i
ekspluatatsii vodnogo transporta (for Shaposhnikov).
(Towing) (Ship propulsion)

KHOBOTOVA, N.M., ekskursovod; TROITSKAYA, N.K.; GRINBERG, A.M.; DOMINSKAYA, G.B.; SHUTOV, T.I.

Exhibitions and displays of special items. Inform. biul.
VDNKH no.10:9-11 '63. (MIRA 18:5)

1. Razdel "Priborostroyeniye i sredstva avtomatizatsii" pavil'ona "Mashinostroyeniye" na Vystavke dostizheniy narodnogo khozyaystva (for Khobotova). 2. Glavnyy inzh.-metodist pavil'ona "Mashinostroyeniye" na Vystavke dostizheniy narodnogo khozyaystva (for Troitskaya). 3. Glavnyy metodist razdela "Geologiya" ob'yedinennogo pavil'ona "Toplivnaya promyshlennosti' i geologiya" na Vystavke dostizheniy narodnogo khozyaystva SSSR (for Dominskaya). 4. Direktor pavil'ona "Molochnaya promyshlennost'" na Vystavke dostizheniy narodnogo khozyaystva SSSR (for Shutov).

ROTENBERG, I.P.; KHOBOTOVA, Ye.N.; YUFEROV, A.M.; KOZLOVA, G.I.

Purification of waste waters from the manufacture of phenol-formaldehyde resins. Plast.massy no.3:69-71 '60.

(MIRA 13:6)

(Sewage--Purification) (Phenols)

L 1352-66 EWP(j)/EWT(m) RM

ACCESSION NR: AP5024395

UR/0286/65/000/015/0080/0080

678,743.22-426

AUTHOR: Kiya, N. V.; Rotenberg, I. P.; Khranova, Z. N.; Khobotova, Ya. N.;
Zapol'skaya, K. I.; Lebedeva, V. S.; Kupriyanova, K. I.; Karmanskaya, M. A.;
Kiselev, M. P.; Yersmin, V. I.; Lopatentova, N. A.

TITLE: A method for producing polyvinyl chloride foam. Class 39, No. 173103 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 80

TOPIC TAGS: polyvinyl chloride, foam plastic

ABSTRACT: This Author's Certificate introduces a method for producing polyvinyl chloride foam by mixing polyvinyl chloride resin with a plasticizer and additives and then saturating the resultant mass with inert gas under pressure and heating it in a high-frequency current field. The processing is made independent of the moisture-content of the resin by vacuum evaporation treatment of the plastic mass before saturation with the inert gas.

ASSOCIATION: Vladimirekiy nauchno-issledovatel'skiy institut sinteticheskikh smol (Vladimir Scientific Research Institute of Synthetic Resins)

SUBMITTED: 02Jan63

ENCL: 00

SUB CODE: MT

NO REF SOV: 000

OTHER: 000

Card 1/1 KC

ACC NR: AP6034761

(N)

SOURCE CODE: UR/0020/66/170/005/1189/1191

AUTHOR: Stroganov, N. S.; Kochkin, D. A.; Khobot'yev, V. G.; Kolosova, L. V.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Use of tin-organic compounds to combat plankton

SOURCE: AN SSSR. Doklady, v. 170, no. 5, 1966, 1189-1191

TOPIC TAGS:

organotin compound, water purifying compound, fungicide

ABSTRACT: In view of the large cost of commercial water purification equipment by filtering, and in view of the absence of a universal chemical poison for plankton, the authors have tested the possible use of tin-organic compounds, especially trialkyl (allyl) substitutes, which have bactericidal, fungicidal, and insecticidal properties. This is the first published reference to the use of these compounds for combatting plankton. The synthesized tin-organic compounds were $(CH_3)_3SnOH$, $(CH_3)_3SnCOCH_3$, $(C_6H_5CH_2)_3SnOH$, and $(C_6H_5CH_2)_3SnCl$, and were tested on phytoplankton and zooplankton. The tests were made in accordance with a procedure described elsewhere (Zool. zhurn. AN SSSR v. 41, no. 1, 1962) and lasted on the average for 30 days. The results showed that even a concentration of 0.02 mg/l killed most of the phytoplankton, and decreased the birth rate of zooplankton by a factor of 3. Ionic tin ($SnCl_2$), tested for comparison, is much weaker and calls for a dose of 35 mg/l. It is proposed that tin-organic

Card 1/2

UDC: 577.472(28)

ACC NR: AP6034761

compounds are superior to mineral tin in that they exhibit a higher toxicity at much lower concentrations. This report was presented by Academician V. N. Shaposhnikov 10 March 1966. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 06/ SUBM DATE: 03Mar66/ ORIG REF: 007/ OTH REF: 008

Card 2/2

KHOBOT'YEV, V.G.

Biogeochemical provinces with calcium deficiency. *Geokhimiia*
no.8:688-696 '60. (MIRA 14:1)

1. V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry,
Academy of Sciences, U.S.S.R., Moscow.

(Transbaikalia--Deficiency diseases)
(Minerals in soil) (Calcium)

KHOBOT'YEV, V.G.

Some materials on the characteristics of biogeochemical provinces
marked by the occurrence of the Urov disease. Trudy Biogeokhii.
lab. no.11:168-177 '60. (MIRA 14:5)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernad'skogo
AN SSSR.

(AMUR PROVINCE—ARTHRITIS, RHEUMATOID)
(CHITA PROVINCE—ARTHRITIS, RHEUMATOID)

TERENT'YEV, A.P.; STROGANOV, N.S.; RUKHADZE, Ye.G.; KNOBOT'YEV, V.G.

Use of polymetallic ores and their products as algicides. Dokl.
AN SSSR 164 no.4:928-930 O '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent
AN SSSR (for Terent'yev).

RAYTSEV, M. (g.Sumy); MARTOS, N., master-povar; CHERKASS, K., shaf-povar
(g.L'vov); KHOBYA, N. (g. Khabarovsk)

Letters to the editor. Obshchestv. pit. no.10:56 0 '61.
(MIRA 15:1)

1. Zaveduyushchiy proizvodstvom restorana "Taymyr", g.
Noril'sk (for Martos).

(Cookery)

KHOPTA, P.

**"Tables showing the number of revolution per second of a vane."
Meteor.i gidrol. no.9:54. (MIRA 8:9)
(Vanes)**

KHOBT, P.M.

~~Integral flow meter. Meteor. i gidrol. no. 12:49-50 D'56.~~
(MIRA 10:1)

(Flow meters)

KHOPTA, P.M.

Some ice formations in tributaries of the Kuban' River.
Meteor. i gidrol. no. 3:51 Mr '57. (MLRA 10'5)
(Kuban' Valley--Ice on rivers, lakes etc.)

KHOBTA P. M.

AUTHORS: Atonen, A., Khobta, P. M.

50-1-16/26

TITLE: Two Opinions on the Report Forms "TD" for Stations and Observation Posts (Dva mneniya o blankakh "TD" dlya stantsiy i postov).

PERIODICAL: Meteorologiya i Gidrologiya 1958, Nr 1, pp. 51-52 (USSR)

ABSTRACT: I. The report forms of the technical data of a station (observation post) which were introduced instead of the earlier "passports" regulate, systematize and considerably simplify the technical recording of the network. The work of the inspectors for the formulation of inspection data is facilitated, therefore the inspectors can now spend more time on practical help in the very spot. In spite of these facts these blanks possess some disadvantages (An enumeration of these disadvantages is given).
II. After looking through the form of technical data for posts (instead of the "passports") the following conclusions may be drawn: At present two technical files were among others instead of a "passport" introduced for almost all observation posts. The volume of work was thereby considerably increased. The data are dispersed and very badly arranged.

Card 1/2

Two Opinions on the Report Forms "TD" for Stations and
Observation Posts.

50-1-16/26

AVAILABLE: Library of Congress
 1. Weather stations

Card 2/2

3(7)

AUTHOR: Khobta, P. M.

SOV/50-59-7-17/20

TITLE: Some Remarks on the New "Instruction" (Nekotoryye zamechaniya po novomu "Nastavleniyu")

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 7, pp 53 - 54 (USSR)

ABSTRACT: On January 1, 1958, the new instruction for hydrometeorological stations and posts, issue 6, part 1 "Hydrometeorological Observations and Investigations of the Rivers", came into force. The instruction is written much better than the former ones, but in spite of this, it shows some shortcomings which are pointed out here in brief.

Card 1/1

KHOBOTOV, V., inzh.

Device for removing and mounting gearboxes. Avt. transp. 42
no.10:30 0 '64. (MIRA 17:11)

KHOBOTOV, Yu.

Reliable support. Mast.ugl. 9 no.9:19 S'60.
(Trade unions) (Coal mines and mining)

(MIRA 13:10)

KHOBOTOV, Yu.

Active volunteer worker. Sov.shakht. 10 no.3:17 Mr '61.

(MIRA 14:7)

(Coal miners)

STROGANOV, N.S.; KHOBOT'YEV, V.G.

Accumulation and release of radioactive phosphorus by aquatic organisms and its distribution in tissues of fish. Vest. Mosk. un. Ser. 6: Biol., pochv. 15 no.4:3-12 J1-Ag '60.

(MIRA 13:10)

1. Kafedra gidrobiologii Moskovskogo universiteta.
(Phosphorus--Isotopes) (Hydrobiology)

KHOBT, S.

Water sumps cleaning by use of pumps. Mast. ugl. no.10:16 0 '59.
(MIRA 13:3)

1. Master vodootlive shakhty No.5 rudnitsa "Langerugol".
(Mining engineering) (Mine water)

Khobta, Ya. M.

127-58-5-15/30

AUTHORS: Bakalov, D.L., and Khobta, Ya.M., Mining Engineers - Electro-mechanics

TITLE: Automatic Water Pumping in an Open Pit (Avtomatizirovanny vodootliv na kar'yere)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 5, p 52 (USSR)

ABSTRACT: Two automatic pumping stations with a 55 to 60 m head were installed in the Dolomitnyy mine of the Yelenovka Mine Administration. The inflow of water is 100 or 120 cu m/hr for each. The "Zapadnaya" station was equipped with 3 pumps, 300 cu m/hour each, of the AYAP-3/300 type manufactured by the Laptevskiy Zavod (Laptevo Plant) driven by 155-kw motors. The "Vostochnaya" station was equipped with 4 pumps, 360 cu m/hour each, of the 6NDV type driven by 80-kw motors. In 1957, both stations were automated using the circuit AVD-3 of the Konotopskiy Zavod (Konotop Plant). At present, both stations are operating smoothly. One electrician, instead of the 6 machinists needed before automation, attends them.

Card 1/2

Automatic Water Pumping in an Open Pit

127-58-5-15/30

There are 2 figures.

ASSOCIATION: Yelenovskoye rudoupravleniye (Yelenovka Mine Administration)

AVAILABLE: Library of Congress

Card 2/2 1. Mines 2. Water pumps-Application

KHOBOT, V. V.	
USSR/Mining	Coal and gas
Card	: 1/1
Authors	: <u>Khobot, V. V.</u>
Title	: Sudden ejections of coal and gas in coal mines
Periodical	: Priroda, 43/7, 35 - 44, July 1954
Abstract	: A brief description of the origin of coal is given showing how the density of a coal vein is diminished through loss of material in the form of CO ₂ , O, and H, and the subsequent absorption of methane, which sometimes accumulates in spots and erupts with explosive violence when pressure is removed by adjacent digging. This situation is analyzed for various mines in the Soviet Union and illustrated with drawings. Measures taken for the safety of workmen are explained.
Institution	:
Submitted	:

Khobykin, A. V.

FD-1765

USSR/Medicine - Therapeutic Diets

Card 1/1 Pub 141-12/15

Author : Khobykin, A. V.

Title : Some problems concerning therapeutic feeding at resorts and sanitariums

Periodical : Vop pit., 55-58, Jan/Feb 1955

Abstract : Mineral water is most effective if given about four hours after eating; hence eating schedules at resorts and sanitariums should be adjusted accordingly. Patients suffering from atherosclerosis should be fed special diets that will keep the cholesterol content down. Discusses other diets that are suitable for cardiac patients those suffering from hypertension and those having liverbile disorders. No references.

Institution: Sanitarium No 1, Kislovodsk

Submitted : --

KESSEL'MAN, L.I.; KHOCH, G.K. [Khoch, H.K.]

Attachment to the Class 27 button machine for the sewing of
buttons with eyelet end. Inh. prom. no.3:77 J1-S '65.
(MIRA 18:9)

KHOCHAVA, A. I.

"Data on the Analysis of the Nature of Chemotherapy for Typhoid Fever." Cand
Med Sci, Central Inst for the Advanced Training Of Physicians, Moscow, 1955.
(KL, No 15, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

KHOCHAVA, A. I.

USSR/Pharmacology. Toxicology. Chemo-Therapeutical Pre- U-7
parations.

Abs Jour : Ref Zhur-Biol., No 7, 1958, 33050

Author : Khochava A. I.

Inst : ~~Not~~ given

Title : Effect of Levomycetin on the Typhoid Fever
Process.

Orig Pub : Zdravookh. Belorussi, 1957, No 5, 12-14

Abstract : No abstract.

1/1

KHOCHENKO, R., inzh.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722110020-6"

Improve the training of automobile drivers. (MIRA 13:1)
no.10:43 0 '58.
(Automobile drivers)

KILIMNIK, I.V.; KHOCHENKO, R.V.; LUTOKHIN, I., red.

[Adjustment of the devices of systems and mechanisms of motor vehicles] Regulirovka priborov sistem i mekhanizmov avtomobilei. Kishinev, Kartia moldoveniaske, 1964. 106 p.
(MIRA 18:10)

STRONE, I.S.; KHOCHENKO, R.V.; OSTROVSKIY, L.L.; LUTOKHIN, I.,
red.

[For the motor-vehicle driver] Voditeliu avtomobilia, Ki-
shinev, Kartia moldoveniaske, 1965. 165 p. (MIRA 18:10)

KHOCHINOV, Ye.R.

Importance of local corn seeds in Bryansk Province. Agrobiologiya
no.2:288-289 Mr-Apr '62. (MIRA 15:4)

1. Kokinskiy sel'skokhozyaystvennyy tekhnikum, Bryanskaya oblast'.
(Bryansk Province---Corn (Maize))

MOISEYEV, V. (Leningrad); GUZ, R. (Leningrad); KHOCHINSKIY, M. (Leningrad)

Unmarketable goods and reducing their price. Sov. torg. 35
no.2:41-42 F '61.
(Retail trade) (Prices)

42161

S/203/62/002/001/012/019
I023/I223

9.4500

AUTHOR: Khocholava, G.M.

TITLE: Anomalous absorption at the polar cap

PERIODICAL: Geomagnetizm i Aeronomiya, v.2, no.1, 1962, 105-113

TEXT: Data from 40 ionospheric stations in the northern hemisphere and 14 in the southern, obtained during the period July, 1957 to July, 1959, are analysed. A correlation of some periods with chromospheric flares of intensity 2 and 2+ is possible. Two types of anomalous absorption in the polar cap are observed: a) small delay (1-6 hrs) of the anomalous absorption relatively to the commencement of the chromospheric flare; the region of anomalous absorption occupies the whole polar cap. b) the anomalous absorption is observed in the beginning only at several stations; during the first hours (sometimes even for 10-15 hrs) the absorption is not a total one. Anomalous absorptions of the first type are caused mainly by flares in the western hemisphere

Card 1/2

S/203/62/002/001/012/019
I023/I223

Anomalous absorption...

of the Sun, of the second type by flares in the eastern hemisphere of the Sun. The seasonal dependence of anomalous absorption is investigated. Several flares are analysed in detail. There are 3 tables and 4 figures.

ASSOCIATION: Institut geofiziki Akademii nauk Grusinskoy SSR
(Institute of Geophysics, Academy of Sciences
Georgian SSR)

SUBMITTED: November 26, 1961

Card 2/2

111152

8/203/62/002/006/008/020

A001/A101

9,9500

AUTHOR: Khocholava, G. M.

TITLE: On anomalous absorption in the polar cap

PERIODICAL: Geomagnetizm i aeronomiya, v. 2, no. 6, 1962, 1095 - 1102

TEXT: The author investigates some problems related to anomalous absorption of radiowaves in the polar cap. The altitude of the absorbing layer was assumed to be ~ 60 km and its thickness about 10 km. The additional ionization in the ionosphere, caused by penetration of high-energy (hundreds Mev) particles at high latitudes, amounts to $\sim 10^4 - 10^5 \text{ cm}^{-3}$ and the density of the fast-particles flux (energies of 10 and 100 Mev) amounts to $\sim 10^{-9} - 10^{-10} \text{ cm}^{-3}$. Then the author describes dynamics of the anomalous absorption region prior to and after the beginning of a geomagnetic storm with sudden commencement. The analysis of the observational data available has shown that there exist three different types of anomalous radiowave absorption related to large B-type chromospheric: 1) anomalous absorption in the polar cap without subsequent transition into a "zonal" one, related to magnetic disturbances and visible

Card 1/2

KHOCHOLAVA, G.M.

Anomalous absorption in the polar cap caused by intense chromo-
spheric bursts. Geomag. i aer. 3 no.5:914-921 S-0 '63.
(MIRA 16:11)

1. Institut geofiziki AN Gruzinskoy SSR.

L 26693-65 FBD/EMI(1)/EMG(v)/FCC/EEC-L/EEC(t)/EMA(h) Po-L/Pe-S/Pq-L/Pae-2/
Peb/Pi-L GW/WS

ACCESSION NR: AR4047582

5/0169/64/000/009/A023/A023

AUTHOR: Khocholava, G. M.

TITLE: Some ionospheric effects of large solar flares

SOURCE: Ref. zh. Geofizika, Abs. 9A143

CITED SOURCE: Tr. In-ta geofiz. AN GruzSSR, v. 21, 1963, 15-24

TOPIC TAGS: ionosphere, solar flare, type-III radio wave absorption, type-IV radio wave absorption, radio emission, magnetic storm, geomagnetic disturbance, radio emission burst, terrestrial magnetic field

ABSTRACT: An analysis was made of nine cases of large solar flares occurring during the period July 1957-August 1958 which caused type-III absorption. The article includes a table of flares, radio emission bursts, type-III and geomagnetic disturbances. Almost all the flares (except one) which caused type-III absorption occurred in the western hemisphere of the sun. Most were preceded by a type-IV radio emission burst and a geomagnetic storm with a peak one to three hours after the burst there was type-III absorption (observed on both the daytime and nighttime sides of the earth). This was caused by the injection of solar particles at high velocities. Anomalous absorption of radio waves

Card 1/2

L 26693-65
ACCESSION NR: AR4047582

days and was stronger in the daytime. Anomalous absorption was observed when the magnetic field was quiet, which can be attributed to the low density of the incident flux of particles. The intensity and duration of absorption are not related by flare intensity. The author discusses the possible nature of the particles responsible for type-III absorption. L. Lyakhova

ENCL: 00

SUB CODE: AA

Cord 2/2

L 13089-66 EMT(1)/FCC/EWA(h) GW

ACC NR: AP6000733

SOURCE CODE: UR/0251/65/039/001/0555/0560

AUTHOR: Gachechiladze, R. G.; Khochclava, G. M.

ORG: Institute of Geophysics, Academy of Sciences, Georgian SSR (Institut geofiziki Akademii nauk Gruzinskoy SSR)

TITLE: Anomalous absorption at the polar cap

SOURCE: AN GruzSSR. Soobshcheniya, v. 39, no. 3, 1965, 555-560

TOPIC TAGS: solar flare, ionospheric absorption, solar chromosphere, solar corpuscular radiation

ABSTRACT: The authors study one of the interesting cases of anomalous absorption associated with a chromospheric flare on 7 July 1968. The data used in the paper are from vertical ionospheric sounding by a world wide network of stations: 67 stations in the northern hemisphere and 34 in the southern hemisphere. High energy electrons and protons were generated by the chromospheric flare. The synchrotron radiation of relativistic electrons was frozen into a plasma cloud. Protons with energies of tens to hundreds of Mev were hurled out by the sun and reached a

Card 1/2

2

L 13089-66

ACC NR: AP6000733

2

terrestrial orbit in 1-2 hours. Because of their comparatively low energy, they fell only into the polar cap regions causing anomalous absorption of the third type. The corpuscular stream thrown out by this flare reached a terrestrial orbit in 31 hours and caused geomagnetic and ionospheric storms, as well as storms in terrestrial currents and cosmic rays. The state of the ionosphere was studied by using hourly and quarter-hourly data on the minimum reflection frequencies during vertical ionospheric probing. The state of the F2 layer was evaluated by deviation of its critical frequencies from the average monthly values in percent. It was found that the state of the F2 layer was nearly calm up until the beginning of the geomagnetic storm. An ionospheric storm began in the initial phase of the geomagnetic storm, gradually reaching almost all latitudes. This disturbance reached a maximum in the principal phase of the geomagnetic storm and gradually decreased, ending on 10 July. Anomalous absorption was observed simultaneously at all northern stations down to a latitude of 64°, while in the southern hemisphere observation was delayed by 3-4 hours. At stations located below a latitude of 64°, anomalous absorption was not observed until 10-20 hours after the chromospheric flare, and was much less pronounced.

SUB CODE: 0803/SUBM DATE: 14Jan65/ ORIG REF: 007/ OTH REF: 002

Cord 2/2

DR

L 9781-66 EWT(1)/FCC/EWA(h) GW
ACC NR: AP5025483

SOURCE CODE: UR/0203/65/005/005/0934/0936

AUTHOR: Gachechiladze, R. G.; Khocholava, G. M.
44.55 44.55 48

ORG: Tbilisi State University (Tbilisskiy gosudarstvennyy universitet); Institute
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TITLE: Anomalous absorption in polar cap

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ABSTRACT: The case of April 10, 1958, was the most interesting of all observed
cases of anomalous absorption in the polar cap. Despite the fact that it was a
typical case of absorption, it was only now that an attempt was made to explain
the occurrence. The data on the vertical probing of the ionosphere, obtained by

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